## **Vermont Mental Health Performance Indicator Project**

DDMHS, Weeks Building, 103 South Main Street, Waterbury, VT 05671-1601 (802-241-2638)

## MEMORANDUM

TO: Vermont Mental Health Performance Indicator Project

Advisory Group and Interested Parties

FROM: John Pandiani and Christine Van Vleck

DATE: October 10, 2003

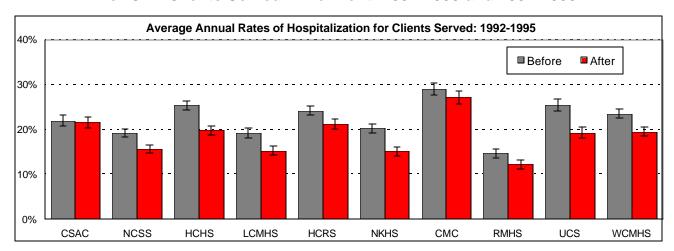
RE: Rates of Hospitalization

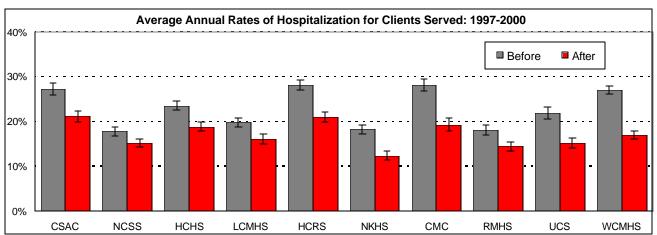
This week's PIP presents the results of an examination of rates of hospitalization for behavioral health care across service sectors (including state, general, veterans', and private hospitals) for adults receiving CRT community services for severe and persistent mental illness. behavioral health hospitalization data set used in this analysis is described in more detail in our report on Inpatient Behavioral Health Care Services Provided to Vermont Residents During 1990-2001 (http://www.state.vt.us/dmh/Data/2001inpatientdatarevised0903.pdf). Hospitalization rates for the year before each treatment year were compared to hospitalization rates for the year after each treatment year during two four year periods: 1992-1995 and 1997-2000. For each of these time periods, average annual hospitalization rates are presented for the year before each treatment year and for the year after each treatment year. Because the inpatient and community mental health databases do not share unique person identifiers, Probabilistic Population Estimation was used to determine the unduplicated number of individuals shared across data sets. Results are presented for the state as a whole and for each of Vermont's ten regional CRT programs. This analysis was conducted following the Recommendations of Vermont's Mental Health Performance Indicator Project Multi-Stakeholder Advisory Group regarding indicators of mental health program performance, treatment outcomes, access to care, and services provided and received (http://www.state.vt.us/dmh/Data/PIPs/pipPerfIndRecs.pdf).

As you will see, there was a significant decrease in hospitalization rates during both time periods and the decrease during the 1997-2000 was substantially greater than during 1992-1995 (27% decrease vs. 18% decrease). During the earlier period, one provider had an average decrease in hospitalization that was greater than 25% (Northeastern Vermont). During the later period, four providers had an average decrease in hospitalization that was greater than 25% (Northeastern Vermont, United Counseling in Bennington, Clara Martin Center in Orange County, and Washington County Mental Health).

We look forward to your interpretation of these findings and your suggestions for future analysis regarding hospitalization outcomes for mental health service recipients. As always, you can reach us at pip@ddmhs.state.vt.us or 802-241-2638.

## Inpatient Behavioral Health Care in State, General, Veteran's, & Private Hospitals During the Year Before and After Community Treatment Services for CRT Clients Served in Vermont: 1992-1995 and 1997-2000





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|-------------------------------|-----------|----------|--------|--------|--------|-------------|--------|--------|---------|--------|--------|--|
|                               | Clinic    |          |        |        |        |             |        |        |         |        | ı      |  |
|                               | Statewide | CSAC     | NCSS   | HCHS   | LCMHS  | <b>HCRS</b> | NKHS   | CMC    | RMHS    | UCS    | WCMHS  |  |
| Average Annual CRT Caseload   |           |          |        |        |        |             |        |        |         |        |        |  |
| 1992-1995                     | 3,306     | 141      | 217    | 614    | 155    | 400         | 489    | 111    | 299     | 236    | 645    |  |
| 1997-2000                     | 3,373     | 175      | 256    | 680    | 149    | 424         | 433    | 136    | 342     | 202    | 578    |  |
| 1992-1995 Average Annual Rate |           |          |        |        |        |             |        |        |         |        |        |  |
| Hospitalized Before Service   | 22%       | 22%      | 19%    | 25%    | 19%    | 24%         | 20%    | 29%    | 15%     | 25%    | 23%    |  |
| +/-                           | (0.4%)    | (1.2%)   | (0.9%) | (1.0%) | (1.0%) | (1.1%)      | (1.0%) | (1.4%) | (1.1%)  | (1.3%) | (0.9%) |  |
| Hospitalized After Service    | 18%       | 22%      | 16%    | 20%    | 15%    | 21%         | 15%    | 27%    | 12%     | 19%    | 19%    |  |
| +/-                           | (0.4%)    | (1.3%)   | (0.9%) | (1.0%) | (1.0%) | (1.1%)      | (1.0%) | (1.4%) | (1.0%)  | (1.3%) | (0.9%) |  |
| Rate of Change                | -18%      | 0%       | -19%   | -22%   | -19%   | -13%        | -26%   | -7%    | -14%    | -24%   | -17%   |  |
| +/-                           | (2.3%)    | (8.0%)   | (6.8%) | (5.7%) | (7.7%) | (6.5%)      | (6.9%) | (6.9%) | (10.3%) | (7.1%) | (5.6%) |  |
| 1997-2000 Average Annual Rate |           |          |        |        |        |             |        |        |         |        |        |  |
| Hospitalized Before Service   | 23%       | 27%      | 18%    | 23%    | 20%    | 28%         | 18%    | 28%    | 18%     | 22%    | 27%    |  |
| +/-                           | (0.4%)    | (1.3%)   | (1.0%) | (1.0%) | (1.1%) | (1.2%)      | (1.1%) | (1.3%) | (1.1%)  | (1.3%) | (1.0%) |  |
| Hospitalized After Service    | 17%       | 21%      | 15%    | 19%    | 16%    | 21%         | 12%    | 19%    | 14%     | 15%    | 17%    |  |
| +/-                           | (0.4%)    | (1.3%)   | (0.9%) | (1.0%) | (1.0%) | (1.2%)      | (1.0%) | (1.4%) | (1.0%)  | (1.2%) | (1.0%) |  |
| Rate of Change                | -27%      | -22%     | -13%   | -20%   | -17%   | -25%        | -32%   | -27%   | -19%    | -26%   | -37%   |  |
| +/-                           | (2.3%)    | (6.8%)   | (7.8%) | (6.1%) | (7.6%) | (6.0%)      | (8.2%) | (6.8%) | (8.3%)  | (8.3%) | (5.3%) |  |

Inpatient behavioral health care includes both inpatient mental health and inpatient substance abuse services. Hospitalization information is derived from the Hospital Discharge Data Set maintained by the Vermont Health Department, and database extracts provided by the Brattleboro Retreat and Vermont State Hospital. CRT client data are obtained from monthly service reports provided to DDMHS by designated agencies for the calendar years 1992-1995 and 1997-2000. Because data sets used in this analysis do not share unique person identifiers, Probabilistic Population Estimation was used to determine caseload size and overlap (with 95% confidence intervals).